

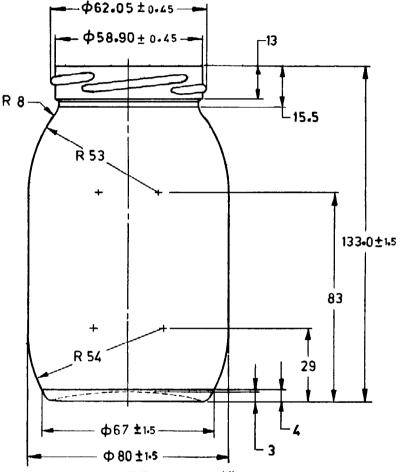
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#### Indian Standard

# SPECIFICATION FOR GLASS JARS FOR PICKLES

- 1. Scope Lays down the requirements for glass jars intended for packaging of pickles and chutneys for export.
- 2. Terminology For the purpose of this standard the terms and definitions as laid down in IS: 6654-1982 'Glossary of terms relating to glass containers ( first revision )' shall apply.
- 3. Dimensions The dimensions of the glass jars for pickles shall be as given in Fig. 1.



All dimensions in millimetres.
FIG. 1 GLASS JAR FOR PICKLES

- 4. Neck Finish The glass jars shall be provided with vacuum lug finish of nominal diameter 63 mm according to IS: 7511 (Part 8)-1986 'Dimensions for neck finishes: Part 8 Vacuum lug finish (first revision)'.
- 5. Material The jars shall be made of colourless glass, as far as possible.
- 6. Capacity and Mass The brimful capacity and the mass of the glass jars shall be as follows:

Nominal Size	<i>Brimful Capacity</i>	Maximum Mass
g	ml	9
500	465 ± 10	280

Adopted 27 January 1987 © July 1987, BIS Gr 2

## 7. General Requirements

- 7.1 The glass jars shall be free from cracks and shall be reasonably free from stones, blisters, bubbles, cords, mould marks, chill marks and other visual defects.
- 7.2 The glass jars shall be well annealed.
- 7.3 The neck lining shall be concentric with body.
- **7.4** Planity The planity of the sealing surface of glass neck finish (lip) shall not exceed 0.4 mm when measured from peak to trough. The method for checking planity deviation shall be as given in Appendix A.

#### 8. Tests

- 8.1 Alkalinity The glass jars shall be tested for the limits of alkalinity as prescribed in IS: 2303-1963 'Method of grading glass for alkalinity' and they shall conform to Type 4.
- **8.2** Brimful Capacity The jars shall be checked for the brimful capacity by the method given in IS: 10497-1983 'Method of test for the determination of brimful capacity of glass containers by gravimetric method'.
- **8.3** Thermal Shock Tests The glass jars shall be subjected to thermal shock tests as laid down in IS: 11930-1986 'Methods of thermal shock tests for glass containers'. The temperature difference ( $t_1 t_2$ ) for the thermal shock test shall be 43°C.

#### 9. Marking and Packing

- 9.1 The glass jars shall be marked with the manufacturer's name or trade-mark.
- 9.1.1 The glass jars shall be packed in accordance with the guidelines given in IS: 6945-1973 'Code of practice for packaging glass and glassware'.
- 9.2 Certification Mark Details available with the Bureau of Indian Standards.

#### APPENDIX A

( Clause 7.4 )

#### METHOD OF CHECKING PLANITY DEVIATION

#### A-1. Apparatus

- A-1.1 The apparatus for checking the planity deviation shall consist of the following:
  - a) Standard surface plate or plane glass plate of 6 mm thickness, and
  - b) Feeler gauge set ranging from 0.05 to 0.64 mm.

#### A-2. Procedure

- A-2.1 The following procedure shall be employed in checking the deviation.
- A-2.1.1 Invert the empty glass jar to be measured, placing the sealing surface on the top of the surface plate or glass plate.
  - A-2.1.2 Lightly press down on the base of the container on opposite side of measurement.
- A-2.1.3 Insert the feeler gauges (starting from 0.05 mm) between the glass sealing surface and the surface plate until the thickest possible feeler gauge just slides in.

Note - No excessive force shall be applied to the feeler gauge.

A-2.1.4 Record the maximum clearance obtained between the glass sealing surface and the surface plate by rotating the jar through 360°, while keeping the base of the jar lightly pressed on the opposite side of measurement.

#### EXPLANATORY NOTE

Glass jars are used in large quantities as a container for pickles and chutneys for export. This standard has been laid down to make available to export trade bottles of desired requirements.

This standard specifies vacuum lug finish. Data is being collected regarding other types of neck finishes being used for glass jars for pickles. Once the data collection and analysis of data is complete, it is proposed to specify other suitable types of neck finishes. Till such time other types of neck finishes may be used as mutually agreed to between the supplier and the purchaser.

## AMENDMENT NO. 1 NOVEMBER 2005 TO

# IS 11985: 1987 SPECIFICATION FOR GLASS JARS FOR PICKLES

( Page 1, clause 2) — Substitute the following for the existing clause:

"2 Terminology — For the purpose of this standard the terms and definitions as laid down in IS 6654: 1992 'Glass containers — Glossary of terms (second revision)' shall apply."

( Page 2, clause 7.4 ) — Insert the following at the end:

### '7.5 Bottle Washing

All bottles shall be thoroughly cleaned immediately before filling by automatic/semi-automatic washing machines. Washing shall be accomplished by prerinse and final rinse. For final rinse dechlorinated potable water shall be used. Bottles should be thoroughly drained, sterilized and dried after final rinse so that strength and purity of content is not affected after filling. Water jets in the washing machine should be so designed and jet pressure so maintained as to thoroughly rinse the whole internal and external surface area of the bottles. Wash water in the bottle washer should be thoroughly drained and changed frequently to prevent algal growth.

- 7.5.1 Wherever second hand bottles are being used, all the bottles should be prewashed prior to feeding to the bottle washer. This should be done in the following manner:
  - a) Pre-rinse first soaking in a tank to remove labels and other extraneous matter.
  - b) Rinse in the second tank with hot water around 60°C and 3 percent caustic solution at 60°C using brushes to clean the interior and exterior of bottles thoroughly.
  - c) Final rinse in the third tank with potable water.
  - d) Feed the bottles to bottle washer.'

( Page 2, clause 8.1 ) — Substitute the following for the existing clause:

"8.1 Limit of Alkalinity — The glass jars shall conform to Class HGB 3 of the glass when graded according to the method prescribed in IS 2303 (Part 1/ Sec 1): 1994 'Grading glass for alkalinity: Part 1 Hydrolytic resistance, Section 1 Hydrolytic resistance of glass grains at 98°C – Method of test and classification (first revision)'."

#### Amend No. 1 to IS 11985: 1987

( Page 2, clause 9.2) — Substitute the following for the existing clause:

'9.2 BIS Certification Mark

Each glass jar may also be marked with the Standard Mark.

9.2.1 The use of the Standard Mark is governed by the provisions of *Bureau of Indian Standards Act*, 1986 and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.'

(CHD 10)